

# Paper Paperboard & Wood Pulp

MONTHLY STATISTICAL SUMMARY - Vol. 62 - No. 10

OCTOBER, 1984

## Paper and Paperboard Production Holding Strong

Paper and paperboard production in September, and indeed in the entire third quarter, showed a less-than-normal seasonal decline. The third quarter rate, adjusted for seasonal and workday factors was close to the annual rate of 69.6 million tons. The corresponding rate for the first half of 1984 was 68.6 million tons per year. If paper and paperboard production continues near the third quarter rate during the remainder of the year, the 1984 total would exceed 69 million tons, to establish a new high.

Both paper and paperboard production followed a similar pattern, each showing less-than-seasonal declines in the third quarter of 1984 and each establishing record-high seasonally adjusted rates.

Nearly all the major paper grades showed relatively strong production trends in September and none showed significant weakness. However, the new orders trend for the uncoated free sheet papers averaged 4.6% less than the shipments total, resulting in a further decline in the unfilled order backlog. As of the end of September, unfilled orders were equivalent to 0.53 months of shipments; in January the backlog was equivalent to 0.79 months of shipments. Total new orders for uncoated free sheet papers in the entire January-September 1984 period were 4.6% below the shipments total, indicating a level of demand that is slightly below that of shipments. Imports of these grades in July and August held close to the 500,000 tons per year level, which was equivalent to about 5% of the domestic production total.

Continued on Page 2

New orders for both uncoated groundwood papers and coated papers were above shipments in the third quarter of 1984. For each of these grades, the rate of orders for the entire first nine months of 1984 was also above that of shipments. (See table on page 3) Imports of uncoated groundwood papers dropped a bit in August, but the eight-month rate was still above one million tons per year, equivalent to two-thirds of the domestic production rate. Coated paper imports also fell a bit in September; its year-to-date rate was equivalent to 6.4% of the domestic production rate.

The trend of packaging and industrial paper production held close to its first-half level in the third quarter of 1984. At 5.85 million tons per year, the year-to-date rate was 5% above its year-earlier rate and close to the record-high of 5.9 million tons established in 1979.

The containerboard grades of paperboard continued to operate at close to capacity levels during the third quarter of 1984. Total containerboard production for domestic use in the January-September period was at a rate in excess of 21 million tons per year, a record high and 11.5% above the 1983 rate. Unbleached kraft linerboard for domestic use was up 12%; semichemical corrugating material for domestic use was also up 12%, while the recycled grades of containerboard, in total, showed virtually no change from a year ago. The bleached paperboard grades were affected by a 9% decline in production for export; total production of these grades was only 5% over its year-earlier level in the January-September 1984 period. The important milk carton grade rose by 5.8% from its 1983 rate; cup stock, by 3.8%.

Production for domestic use of the other paperboard grades, which include tube, can and drum stock along with such non-packaging grades as gypsum wallboard facing and panelboard, held up well in September. The year-to-date total showed a 12% gain over its 1983 rate.

While production of paperboard for export in September declined to 232,000 tons from the relatively high August level, it did hold at the level of the two preceding months. The year-to-date total was down 11% from its 1983 rate, but remained above the rate of the preceding year and, indeed, above the rate of any earlier year except for 1980.

## PAPER AND PAPERBOARD STATISTICS

Page 3

PRODUCTION, SHIPMENTS AND ORDERS  
(Thousands of Tons)

|                                                     | 1982  | 1983  | JUNE<br>1984 | JULY<br>1984 | AUG.<br>1984 | SEPT<br>1984 | Annual<br>Rate<br>Y-T-D<br>1984 | % Change<br>From same<br>Period<br>Last Year |
|-----------------------------------------------------|-------|-------|--------------|--------------|--------------|--------------|---------------------------------|----------------------------------------------|
| <b>PAPER</b>                                        |       |       |              |              |              |              |                                 |                                              |
| Newsprint - Production                              | 5042  | 5187  | 488          | 451          | 470          | 447          | 5581                            | 8.2                                          |
| - Shipments                                         | 4988  | 5153  | 461          | 455          | 459          | 451          | 5624                            | 10.4                                         |
| Printing & Writing                                  | 1561  | 17387 | 1547         | 1454         | 1562         | 1511         | 18516                           | 8.2                                          |
| Groundwood Paper - Shipments                        | 1471  | 1531  | 131          | 138          | 129          | 133          | 1601                            | 8.7                                          |
| - New Orders                                        | 1481  | 1581  | 125          | 139          | 150          | 133          | 1651                            | 5.0                                          |
| - Unfilled Orders                                   | 82    | 158   | 165          | 150          | 166          | 167          | 167                             | 6.2                                          |
| Coated Paper - Shipments                            | 4874  | 5886  | 524          | 478          | 538          | 513          | 6213                            | 11.8                                         |
| - New Orders                                        | 4941  | 5886  | 542          | 502          | 545          | 496          | 6245                            | 7.1                                          |
| - Unfilled Orders                                   | 322   | 546   | 510          | 495          | 488          | 472          | 472                             | -13.6                                        |
| Uncoated Free Sheet - Shipments                     | 7855  | 8767  | 764          | 725          | 773          | 741          | 8222                            | 6.3                                          |
| - New Orders                                        | 7827  | 9077  | 696          | 694          | 728          | 727          | 8800                            | -3.2                                         |
| - Unfilled Orders                                   | 321   | 688   | 427          | 449          | 400          | 389          | 389                             | -42.0                                        |
| Thin Paper - Shipments                              | 329   | 328   | 31           | 25           | 28           | 27           | 343                             | 2.8                                          |
| Cotton Fiber Paper - Shipments                      | 120   | 131   | 12           | 10           | 13           | 11           | 142                             | 8.2                                          |
| Bleached Bristols - Production                      | 862   | 834   | 84           | 77           | 82           | 86           | 984                             | 7.6                                          |
| Tissue Paper - Production                           | 4438  | 4780  | 402          | 405          | 411          | 388          | 4853                            | 1.7                                          |
| Total Packagings & Other Paper                      | 5300  | 5633  | 472          | 484          | 481          | 462          | 5853                            | 5.0                                          |
| Unbl. Kraft Paper - Shipments                       | 3688  | 3807  | 316          | 328          | 318          | 313          | 3900                            | 3.3                                          |
| Other Paper - Production                            | 1812  | 1828  | 156          | 156          | 162          | 149          | 1953                            | 8.5                                          |
| TOTAL PAPER-Production-Unadj. *                     | 30380 | 32877 | 2888         | 2794         | 2924         | 2806         | 34782                           | 6.7                                          |
| -Production-S.A. *                                  |       |       | 2820         | 3007         | 2811         | 2826         | 34598                           | 6.3                                          |
| <b>PAPERBOARD - PRODUCTION</b>                      |       |       |              |              |              |              |                                 |                                              |
| Solid Wood Pulp Furnish                             | 22588 | 24778 | 2281         | 2184         | 2323         | 2233         | 26831                           | 8.7                                          |
| Unbl. Kraft Linerboard (1)                          | 13484 | 15001 | 1388         | 1296         | 1421         | 1378         | 16288                           | 9.0                                          |
| Production For Export                               | 1931  | 2281  | 180          | 174          | 214          | 177          | 2146                            | -8.1                                         |
| Other Unbl. Kraft Paperboard                        | 1040  | 1121  | 107          | 107          | 101          | 92           | 1197                            | 4.1                                          |
| Semichemical Paperboard                             | 4388  | 4730  | 443          | 436          | 451          | 436          | 5227                            | 11.8                                         |
| Production For Export                               | 185   | 193   | 10           | 9            | 17           | 14           | 154                             | -27.8                                        |
| Solid Bleached Paperboard                           | 3663  | 3826  | 342          | 344          | 351          | 328          | 4107                            | 4.8                                          |
| Production For Export                               | 525   | 514   | 41           | 36           | 37           | 39           | 478                             | -9.4                                         |
| Recycled Paperboard                                 | 6476  | 7388  | 673          | 609          | 645          | 621          | 7971                            | 8.8                                          |
| Production For Export                               | 13    | 24    | 1            | 1            | 2            | 2            | 16                              | -40.2                                        |
| TOTAL PAPERBOARD-Prod.-Unadj. *                     | 28065 | 32177 | 2854         | 2792         | 2968         | 2854         | 34802                           | 8.7                                          |
| - Containerboard Prod.(Dom. Use)                    | 17508 | 18173 | 1807         | 1706         | 1797         | 1783         | 21148                           | 11.5                                         |
| - Boxboard Prod.(Dom. Use) (2)                      | 5150  | 5551  | 481          | 478          | 510          | 485          | 5855                            | 8.2                                          |
| - All Other P'bd Prod.(D.U.) (2)                    | 3753  | 4397  | 433          | 388          | 390          | 374          | 4908                            | 12.2                                         |
| - Total Paperbd Prod. For Export                    | 2654  | 3012  | 233          | 220          | 270          | 232          | 2781                            | -10.7                                        |
| TOTAL PAPERBOARD PROD.- S.A. *                      |       |       | 2854         | 2830         | 2856         | 3001         | 34376                           | 8.4                                          |
| TOTAL PAPER AND PAPERBOARD<br>Production - actual * | 58445 | 65054 | 5842         | 5586         | 5891         | 5680         | 69584                           | 7.7                                          |
| Production - S.A. *                                 |       |       | 5675         | 5937         | 5688         | 5927         | 68972                           | 7.3                                          |

(1) Includes all exports of kraft paperboard.

(2) Data for unbl. kraft folding boxboard incl. in All Other P'bd.

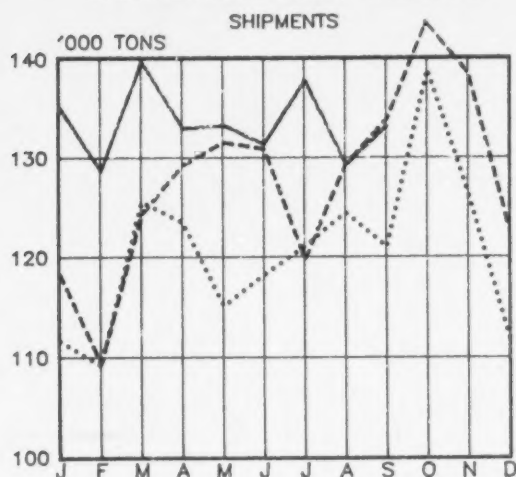
\* NOTE: Year 1984 contains one more day than year 1983.

P Preliminary

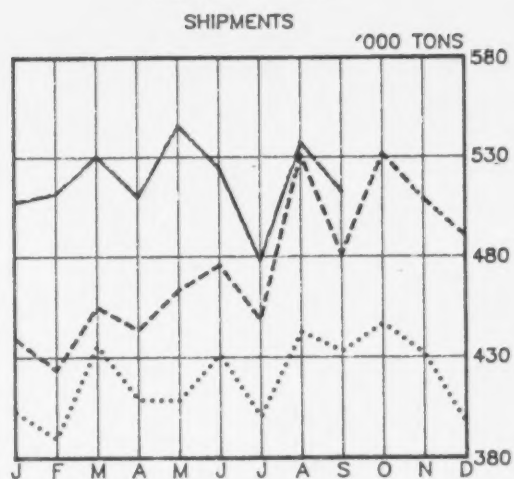
R Revised

S.A. Seasonally Adjusted

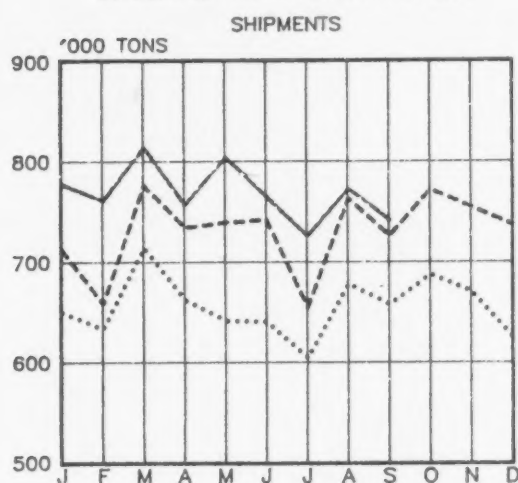
## GROUNDWOOD PAPER, UNCOATED



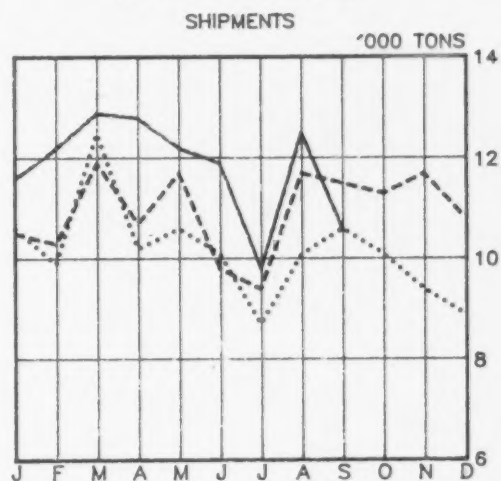
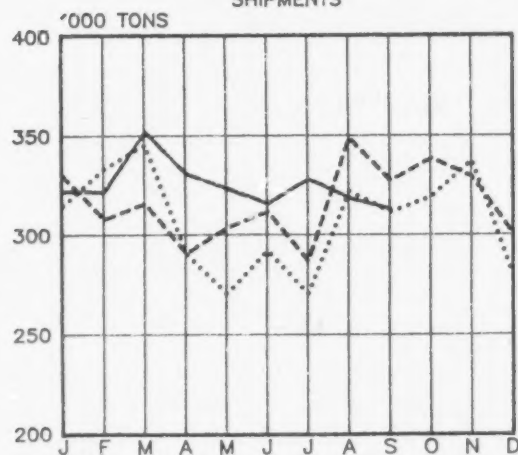
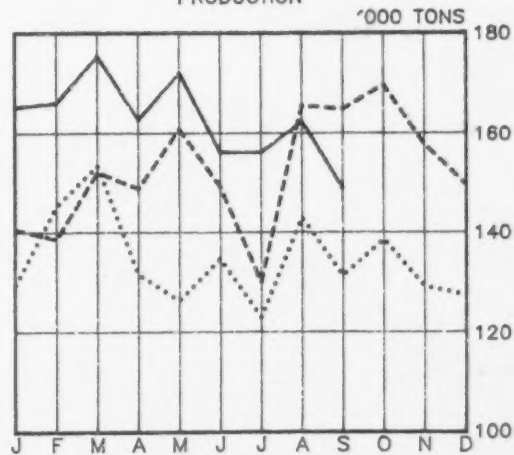
## COATED PAPER



## UNCOATED FREE SHEET PAPERS



## COTTON FIBER PAPER

UNBLEACHED KRAFT PACKAGING  
AND INDUSTRIAL CONVERTING PAPEROTHER PAPER  
PRODUCTION

1982 ..... 1983 ----- 1984 ———

# WOOD PULP STATISTICS

(Thousands of Tons)

|                                            | YEAR  |       | MAY                                       | JUNE | JULY | AUG. | Annual | % Change  |
|--------------------------------------------|-------|-------|-------------------------------------------|------|------|------|--------|-----------|
|                                            | 82    | 83    | 84                                        | 84   | 84   | 84   | Rate   | From same |
|                                            |       |       |                                           |      |      |      | Y-T-D  | Period    |
|                                            |       |       |                                           |      |      |      | 84     | Last Year |
| <b>TOTAL WOOD PULP</b>                     |       |       |                                           |      | R    | P    |        |           |
| Total Wood Pulp - Production               | 49334 | 52537 | 4762                                      | 4696 | 4530 | 4790 | 56068  | 7.7       |
| - Imports                                  | 3656  | 4093  | 387                                       | 360  | 357  | 389  | 4394   | 11.6      |
| - Exports                                  | 3385  | 3644  | 336                                       | 307  | 279  | 318  | 3660   | 3.2       |
| - New Supply                               | 49595 | 52998 | 4813                                      | 4749 | 4608 | 4860 | 56800  | 9.3       |
| Dissolving Pulp - Production               | 1082  | 1261  | 109                                       | 100  | 99   | 109  | 1263   | 0.9       |
| - Imports                                  | 188   | 192   | 17                                        | 7    | 15   | 9    | 153    | -25.8     |
| - Exports                                  | 631   | 647   | 47                                        | 57   | 41   | 43   | 608    | -0.3      |
| - New Supply                               | 647   | 806   | 80                                        | 50   | 73   | 74   | 810    | -4.8      |
| Paper Grades - Production                  | 39478 | 42358 | 3826                                      | 3787 | 3645 | 3890 | 45098  | 7.4       |
| Chemical Pulp - Imports                    | 3302  | 3706  | 348                                       | 331  | 321  | 353  | 3874   | 11.6      |
| - Exports                                  | 2736  | 2958  | 283                                       | 243  | 229  | 272  | 2985   | 3.5       |
| - New Supply                               | 40044 | 43106 | 3892                                      | 3856 | 3736 | 3972 | 46077  | 9.0       |
| Groundwood and Thermo-Mech. - Production   | 5064  | 5087  | 476                                       | 482  | 471  | 481  | 5615   | 12.3      |
| - Imports                                  | 167   | 185   | 21                                        | 22   | 21   | 26   | 287    | 57.0      |
| - Exports                                  | 27    | 40    | 7                                         | 6    | 9    | 3    | 57     | 25.2      |
| - New Supply                               | 5204  | 5222  | 489                                       | 498  | 483  | 483  | 5825   | 13.6      |
| Semi-Chemical - Production                 | 3699  | 3851  | 351                                       | 346  | 316  | 330  | 4088   | 6.9       |
| - Imports                                  | 0     | 0     |                                           |      |      |      |        |           |
| - Exports                                  | 0     | 0     |                                           |      |      |      |        |           |
| - New Supply                               | 3699  | 3851  | 351                                       | 346  | 316  | 330  | 4088   | 6.9       |
|                                            |       |       | ----- Included with Groundwood Pulp ----- |      |      |      |        |           |
|                                            |       |       | 351                                       | 346  | 316  | 330  | 4088   | 6.9       |
| <b>MARKET WOOD PULP</b>                    |       |       |                                           |      |      |      |        |           |
| Total Market Wood Pulp - Production        | 5732  | 6478  | 561                                       | 554  | 572  | 593  | 6810   | 5.5       |
| - Imports                                  | 2443  | 2845  | 274                                       | 255  | 281  | 273  | 3209   | 13.8      |
| - Exports                                  | 3143  | 3421  | 285                                       | 313  | 253  | 290  | 3510   | 1.8       |
| - New Supply                               | 5031  | 6002  | 540                                       | 486  | 589  | 575  | 6508   | 11.7      |
| Dissolving Pulp - Production               | 1089  | 1260  | 110                                       | 100  | 99   | 108  | 1263   | 0.8       |
| - Imports                                  | 194   | 210   | 24                                        | 11   | 20   | 9    | 196    | -5.8      |
| - Exports                                  | 675   | 696   | 63                                        | 61   | 45   | 50   | 693    | 0.0       |
| - New Supply                               | 608   | 772   | 71                                        | 50   | 74   | 67   | 766    | -0.4      |
| Paper Grades - Production                  | 4643  | 5206  | 450                                       | 452  | 472  | 483  | 5534   | 6.6       |
| Chemical Pulp - Imports                    | 2202  | 2698  | 242                                       | 238  | 254  | 280  | 2945   | 14.2      |
| - Exports                                  | 2468  | 2723  | 232                                       | 252  | 208  | 240  | 2817   | 2.3       |
| - New Supply                               | 4377  | 5181  | 460                                       | 438  | 518  | 503  | 5661   | 12.8      |
| Groundwood Pulp and All Other - Production | 1     | 12    | 1                                         | 2    | 1    | 1    | 13     | 17.1      |
| - Imports                                  | 46    | 38    | 8                                         | 6    | 7    | 4    | 80     | 178.7     |
| - Exports                                  | 1     | 0     | 0                                         | 0    | 0    | 0    | 0      | 100.0     |
| - New Supply                               | 47    | 49    | 9                                         | 8    | 7    | 5    | 93     | 131.7     |

SOURCES: Total Wood Pulp Production & Market Wood Pulp Production, Imports & Exports - Pulp Division, Pulp, Materials and Technology Group, API. Total Wood Pulp Imports & Exports - Department of Commerce.

## FIBROUS RAW MATERIALS

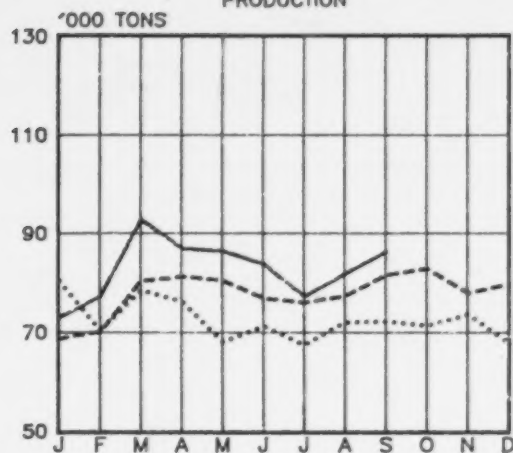
(Thousands of tons)

|                                                                 |       |       |      |      |      |      |       |       |
|-----------------------------------------------------------------|-------|-------|------|------|------|------|-------|-------|
| <b>CONSUMPTION AT PAPER &amp; PAPERBOARD MILLS</b>              |       |       |      |      | R    | P    |       |       |
| Total                                                           | 61332 | 65517 | 6100 | 5856 | 5656 | 6040 | 70492 | 9.1   |
| Total Wood Pulp                                                 | 47767 | 50978 | 4703 | 4562 | 4437 | 4690 | 54640 | 8.7   |
| Waste Paper                                                     | 13565 | 14539 | 1397 | 1294 | 1219 | 1350 | 15852 | 10.5  |
| <b>INVENTORIES</b>                                              |       |       |      |      |      |      |       |       |
| Own Use Wood Pulp at Pulp Mills                                 | 177   | 170   | 146  | 159  | 153  | 155  | 155   | -24.8 |
| Market Pulp at Pulp Mills                                       | 437   | 384   | 329  | 319  | 379  | 408  | 408   | -14.7 |
| Mkt Pulp at Ppr. & Bd. Mills & Waste Paper at Paper & Bd. Mills | 429   | 504   | 594  | 596  | 542  | 506  | 506   | 18.5  |
|                                                                 | 1022  | 920   | 858  | 870  | 834  | 955  | 955   | 10.1  |
| Days of Supply at Pulp Mills of Chemical Paper Grade Mkt Pulp   | 37    | 26    | 21   | 25   | 30   | 29   | 29    | -14.7 |

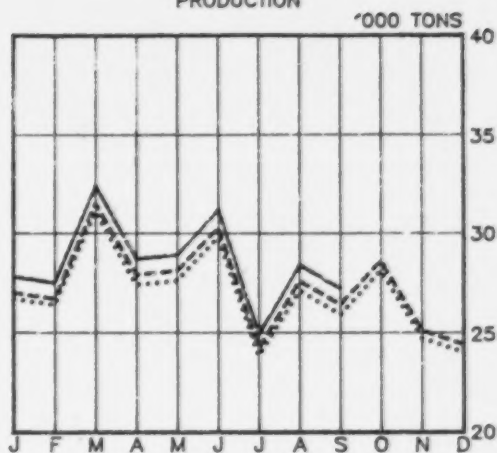
SOURCES: Wood Pulp Data, Pulp Division, Pulp, Materials and Technology Group, API. Waste Paper Data, Paper Recycling Committee, API.

\* - Census data prior to 1982; P - Preliminary; R - Revised; (0) - Indicates zero to five-hundred short tons

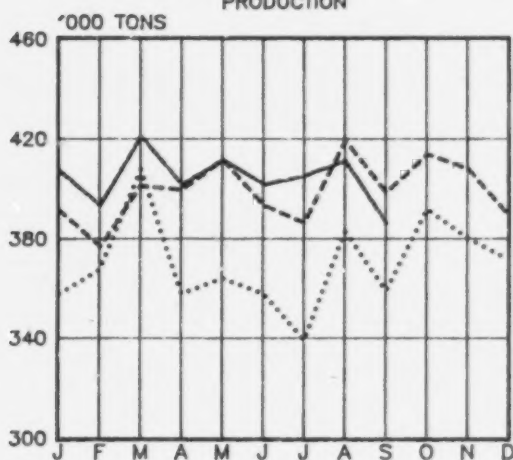
### BLEACHED BRISTOLS PRODUCTION



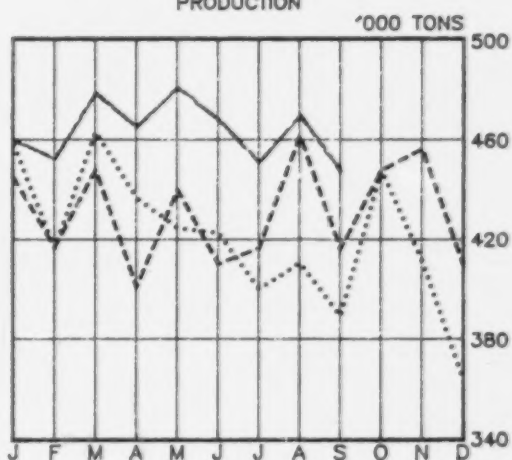
### THIN PAPER PRODUCTION



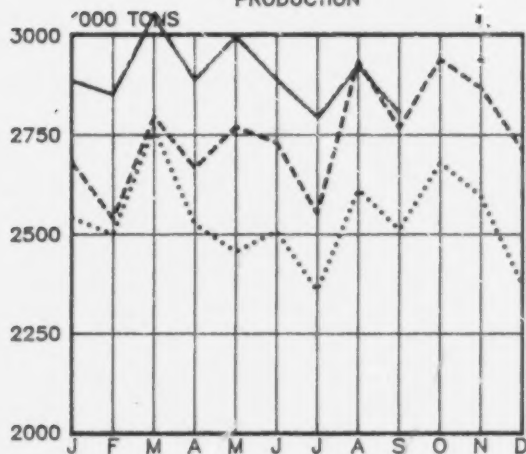
### TISSUE PAPER PRODUCTION



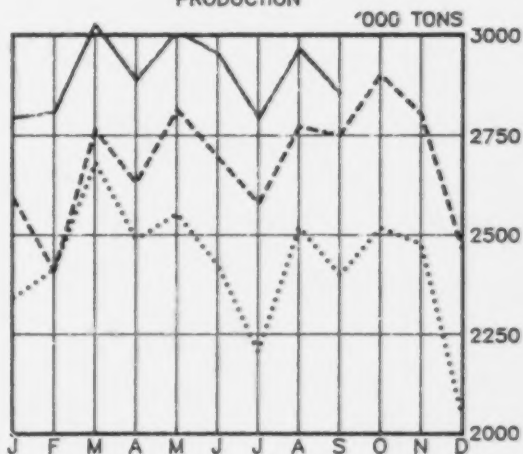
### NEWSPRINT PRODUCTION



### TOTAL PAPER PRODUCTION



### TOTAL PAPERBOARD PRODUCTION



1982 ..... 1983 ----- 1984 ———

**FIBROUS RAW MATERIALS (Continued)**  
(Thousands of Standard (128 cubic foot) Cords)

Page 7

| Thousands of Standard (128 cubic foot) Cords |                   |       |       |      |      |      |      |                     |                                  |
|----------------------------------------------|-------------------|-------|-------|------|------|------|------|---------------------|----------------------------------|
|                                              |                   | YEAR  |       | MAY  | JUNE | JULY | AUG. | Annual              | % Change                         |
|                                              |                   | 82    | 83    | 84   | 84   | 84   | 84   | Rate<br>Y-T-D<br>84 | From same<br>Period<br>Last Year |
| PULPWOOD                                     |                   |       |       |      |      |      |      |                     |                                  |
| Total U.S.                                   | - Total Receipts  | 78518 | 84475 | 7425 | 7423 | 7187 | 7642 | 88326               | 5.8                              |
|                                              | - Total Consumpt. | 79039 | 85442 | 7439 | 7264 | 7192 | 7388 | 88121               | 3.6                              |
|                                              | - Residues *      | 31152 | 32755 | 2817 | 2652 | 2547 | 2690 | 32556               | 0.3                              |
|                                              | - Inventories     | 5426  | 5228  | 4782 | 4682 | 4621 | 4825 | 4825                | -6.8                             |
| So. Atlantic                                 | - Total Receipts  | 23768 | 25736 | 2285 | 2402 | 2301 | 2336 | 26753               | 5.0                              |
|                                              | - Total Consumpt. | 23725 | 25847 | 2212 | 2290 | 2301 | 2318 | 26708               | 3.8                              |
|                                              | - Residues *      | 8273  | 7904  | 715  | 721  | 660  | 684  | 8142                | 4.9                              |
|                                              | - Inventories     | 1185  | 1163  | 1033 | 1080 | 1038 | 1049 | 1045                | -8.8                             |
| Northeast                                    | - Total Receipts  | 7283  | 7051  | 568  | 606  | 577  | 615  | 7331                | 7.4                              |
|                                              | - Total Consumpt. | 7221  | 7274  | 586  | 648  | 542  | 574  | 7554                | 4.7                              |
|                                              | - Residues *      | 1452  | 1189  | 125  | 113  | 115  | 146  | 1439                | 26.7                             |
|                                              | - Inventories     | 652   | 577   | 410  | 375  | 422  | 481  | 481                 | 2.6                              |
| South Central                                | - Total Receipts  | 26510 | 29408 | 2638 | 2705 | 2555 | 2788 | 31103               | 7.5                              |
|                                              | - Total Consumpt. | 27153 | 29152 | 2591 | 2575 | 2618 | 2708 | 30803               | 6.2                              |
|                                              | - Residues *      | 8616  | 9218  | 748  | 769  | 757  | 822  | 9118                | -0.8                             |
|                                              | - Inventories     | 1346  | 1536  | 1381 | 1426 | 1181 | 1215 | 1215                | -7.1                             |
| North Central                                | - Total Receipts  | 5601  | 6285  | 554  | 582  | 576  | 632  | 7088                | 13.7                             |
|                                              | - Total Consumpt. | 5708  | 6343  | 590  | 560  | 523  | 558  | 6765                | 6.8                              |
|                                              | - Residues *      | 1517  | 1822  | 146  | 136  | 121  | 138  | 1545                | -14.1                            |
|                                              | - Inventories     | 825   | 851   | 836  | 821  | 817  | 655  | 855                 | 2.6                              |
| West                                         | - Total Receipts  | 15356 | 16014 | 1382 | 1128 | 1188 | 1270 | 16052               | 0.3                              |
|                                              | - Total Consumpt. | 15234 | 16826 | 1460 | 1191 | 1208 | 1209 | 16290               | -2.8                             |
|                                              | - Residues *      | 11294 | 12612 | 1083 | 913  | 894  | 900  | 12312               | -1.5                             |
|                                              | - Inventories     | 1338  | 1102  | 1127 | 980  | 1152 | 1229 | 1229                | -13.7                            |

\* - Consumption of Residues in Cord Equivalents.

SOURCE: American Pulpwood Association

**UNITED STATES TRADE WITH CANADA**  
IMPORTS FROM CANADA

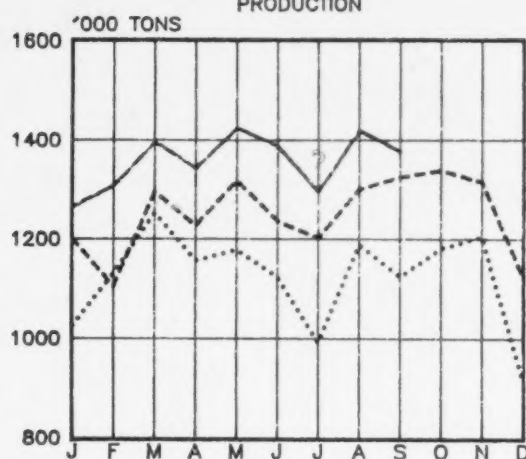
|                                                             | YEAR    |         | JULY   |        | AUG.   |        | Annual              | % Change                         |
|-------------------------------------------------------------|---------|---------|--------|--------|--------|--------|---------------------|----------------------------------|
|                                                             | Tons    | \$000   | Tons   | \$000  | Tons   | \$000  | Rate<br>Y-T-D<br>84 | From same<br>Period<br>Last Year |
| Pulpwood, Roundwood<br>(in cords of 128 cubic feet)         | 155124  | 7471    | 31923  | 1851   | 8988   | 465    | 183023              | 78.8                             |
| Pulpwood Chips                                              | 1987168 | 48879   | 151199 | 3336   | 122376 | 2867   | 2288433             | 16.7                             |
| Wood Pulp, Total                                            | 3755201 | 1363975 | 322781 | 141017 | 359714 | 152538 | 4035887             | 12.1                             |
| Waste Fibrous Materials, Total                              | 157732  | 26481   | 12364  | 2275   | 13198  | 2518   | 158233              | 0.3                              |
| Paper, Board & Products, Total                              | 8274914 | 3372726 | 852052 | 365480 | 848876 | 360937 | 8342858             | 15.2                             |
| Paper, Paperboard, Wet Machine Bd.<br>& Constr. Paper & Bd. | 8221322 | 3274062 | 845749 | 355105 | 843576 | 352867 | 8276759             | 15.1                             |
| Paper Paperboard & Products                                 | 7846516 | 3277874 | 804934 | 355386 | 803950 | 350852 | 8898641             | 16.2                             |
| Paper & Paperboard, Only                                    | 7792924 | 3179310 | 798631 | 345021 | 798650 | 342882 | 8832540             | 16.0                             |
| Paper, Total                                                | 7633585 | 3139193 | 782828 | 340410 | 792062 | 337831 | 8609724             | 15.4                             |
| Newsprint                                                   | 6845135 | 2732234 | 685092 | 282489 | 696391 | 288845 | 7690520             | 14.6                             |
| Printing, Writing & Rel. Pap.                               | 695907  | 348512  | 79625  | 42214  | 76948  | 42019  | 800096              | 19.9                             |
| Pack. & Ind. Conv. Paper                                    | 78209   | 46889   | 6113   | 3884   | 7251   | 4824   | 99830               | 32.7                             |
| Special Industrial Paper                                    | 2732    | 4473    | 453    | 787    | 170    | 291    | 3307                | 25.5                             |
| Tissue Paper                                                | 10602   | 7085    | 1545   | 1026   | 1303   | 852    | 15872               | 56.6                             |
| Paperboard, Total                                           | 150339  | 40117   | 15802  | 4611   | 16587  | 5052   | 222817              | 51.0                             |
| Convtd Paper&Paperbd Products                               | 53592   | 98684   | 8303   | 10375  | 5300   | 8070   | 66101               | 32.2                             |
| Wet Machine Board                                           | 3036    | 1916    | 100    | 69     | 123    | 84     | 2261                | -28.5                            |
| Construction Paper & Board                                  | 425362  | 82836   | 47017  | 10015  | 44803  | 8901   | 441857              | -0.8                             |

**EXPORTS TO CANADA**

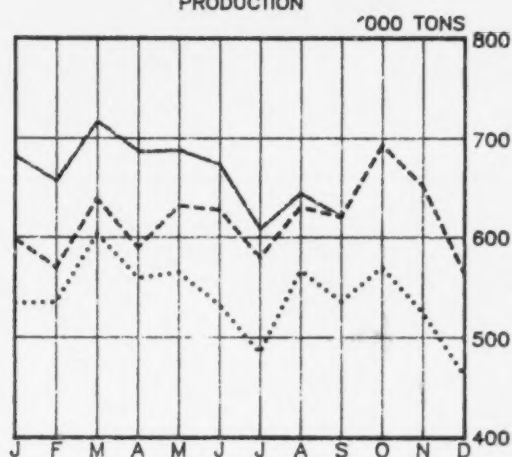
|                                                               |        |        |       |       |       |       |        |       |
|---------------------------------------------------------------|--------|--------|-------|-------|-------|-------|--------|-------|
| Pulpwood, Roundwood<br>(in cords of 128 cubic feet)           | 68965  | 4381   | 8374  | 571   | 7905  | 591   | 78942  | 44.0  |
| Pulpwood Chips                                                | 38246  | 2026   | 148   | 7     | 3340  | 153   | 32247  | -17.3 |
| Wood Pulp, Total                                              | 133633 | 55368  | 14391 | 6775  | 14230 | 6651  | 168621 | 25.8  |
| Cotton Pulp & Other Pulp                                      | 9567   | 5287   | 593   | 371   | 1156  | 694   | 11087  | 21.3  |
| Waste Paper                                                   | 346809 | 38478  | 29815 | 3421  | 30061 | 3533  | 339098 | 0.4   |
| Paper, Board & Products, Total                                | 658228 | 471256 | 61252 | 42106 | 59838 | 43833 | 779778 | 19.9  |
| Paper, Paperboard, Wet Machine Bd.<br>& Constr. Paper & Board | 448117 | 308687 | 46637 | 29461 | 44183 | 28741 | 571834 | 26.9  |
| Paper, Paperboard & Products                                  | 828108 | 459325 | 58978 | 41033 | 56688 | 42435 | 747714 | 21.0  |
| Paper & Paperboard, Only                                      | 416998 | 294756 | 44363 | 28388 | 41033 | 27342 | 539568 | 29.2  |
| Paper, Total                                                  | 230771 | 210826 | 28445 | 20848 | 19691 | 18497 | 308326 | 34.0  |
| Newsprint                                                     | 4312   | 3805   | 308   | 267   | 290   | 274   | 5116   | 28.2  |
| Printing, Writing & Rel. Pap.                                 | 125110 | 101541 | 11579 | 10391 | 10582 | 9743  | 139033 | 13.1  |
| Pack. & Ind. Conv. Paper                                      | 34403  | 20821  | 4070  | 2498  | 3897  | 2344  | 46884  | 46.3  |
| Special Industrial Paper                                      | 63390  | 81388  | 12178 | 7461  | 4615  | 5751  | 115335 | 69.5  |
| Tissue                                                        | 3556   | 2868   | 310   | 231   | 306   | 386   | 2859   | -20.8 |
| Paperboard, Total                                             | 186228 | 84131  | 15918 | 7541  | 21342 | 8845  | 230243 | 23.2  |
| Convtd Paper&Paperbd Products                                 | 211112 | 164568 | 14615 | 12645 | 15656 | 15093 | 208145 | 4.0   |
| Wet Machine Board                                             | 5289   | 2978   | 351   | 338   | 476   | 394   | 5400   | -6.1  |
| Construction Paper & Bd. E                                    | 25831  | 8955   | 1923  | 735   | 2674  | 1005  | 26665  | -1.7  |

SOURCE: Bureau of Census, Department of Commerce. E - Estimate of tonnage based on square foot data

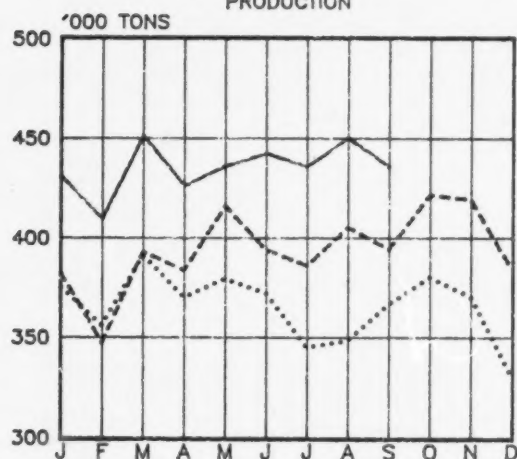
# UNBLEACHED KRAFT LINERBOARD PRODUCTION



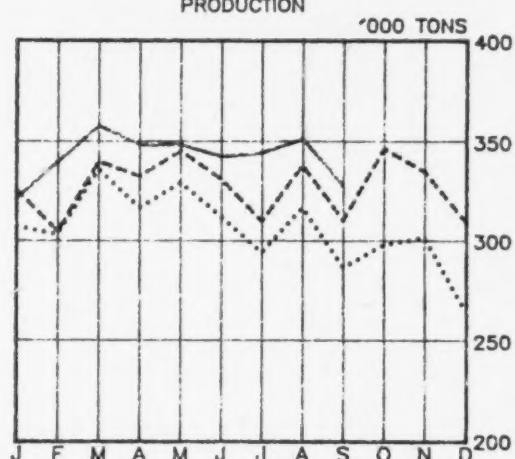
# RECYCLED PAPERBOARD PRODUCTION



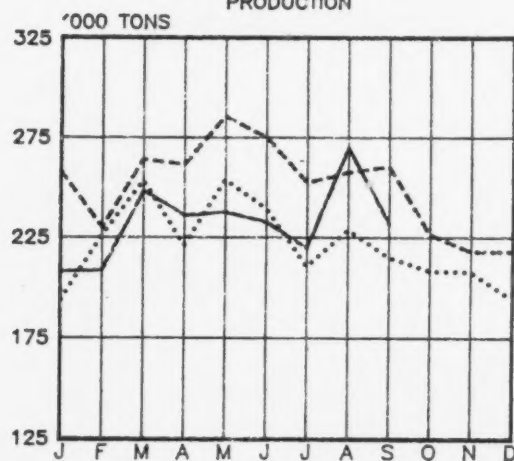
# SEMICHEMICAL PAPERBOARD PRODUCTION



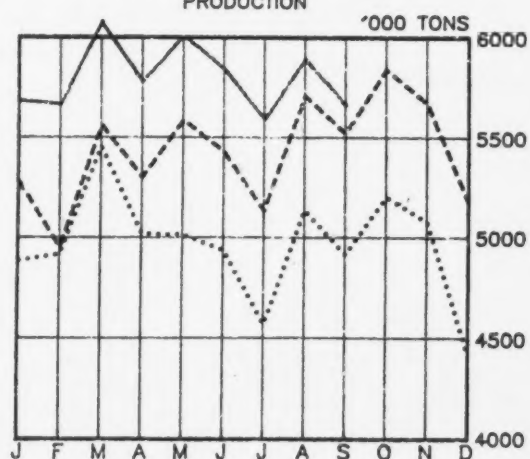
# SOLID BLEACHED PAPERBOARD PRODUCTION



# PAPERBOARD FOR EXPORT PRODUCTION



# TOTAL PAPER AND PAPERBOARD PRODUCTION



1982 ..... 1983 ----- 1984 ———

## PULP, PAPER AND PAPERBOARD IMPORTS AND EXPORTS DATA

Page 9

## I M P O R T S

|                                                               | YEAR 1983 |         | JULY 1984 |        | AUG. 1984 |        | (1)<br>Annual<br>Rate<br>Y-T-D<br>1984 | % Change<br>from same<br>Period<br>Last Year |
|---------------------------------------------------------------|-----------|---------|-----------|--------|-----------|--------|----------------------------------------|----------------------------------------------|
|                                                               | Tons      | \$000   | Tons      | \$000  | Tons      | \$000  |                                        |                                              |
| Pulpwood Roundwood (cords)                                    | 155124    | 7471    | 31923     | 1851   | 9988      | 465    | 183088                                 | 79.8                                         |
| Pulpwood Chips                                                | 1991453   | 49104   | 151218    | 3339   | 122794    | 2875   | 2289338                                | 16.4                                         |
| Total All Imports                                             | 13248280  | 5526141 | 1409498   | 659086 | 1393512   | 641883 | 15665421                               | 22.6                                         |
| Wood Pulp Total                                               | 4093436   | 1472478 | 356727    | 154666 | 388975    | 164996 | 4394195                                | 11.6                                         |
| Waste Paper                                                   | 100410    | 10537   | 7940      | 866    | 7617      | 739    | 109628                                 | 8.8                                          |
| Other Fibrous Materials                                       | 68003     | 24272   | 5700      | 2003   | 7045      | 2709   | 72144                                  | 6.8                                          |
| Paper Board & Products Total                                  | 8986431   | 4018855 | 1039132   | 501552 | 989875    | 473439 | 11089453                               | 27.8                                         |
| Paper Paperboard Wet Machine Bd. & Construction Paper & Board | 8834560   | 3582292 | 1018840   | 449340 | 969581    | 428211 | 10875812                               | 27.5                                         |
| Paper Pbd & Prds ex Cnst&HMB                                  | 8509180   | 3911591 | 987218    | 489995 | 940184    | 462235 | 10598708                               | 29.7                                         |
| Paper & Paperboard Only                                       | 8357309   | 3475028 | 966925    | 437782 | 919890    | 417007 | 10385067                               | 29.3                                         |
| Paper Total                                                   | 8189491   | 3428868 | 941568    | 430253 | 901277    | 411150 | 10129973                               | 28.6                                         |
| Newsprint                                                     | 6919348   | 2757524 | 721737    | 302396 | 713235    | 295876 | 7916399                                | 16.9                                         |
| Printings & Writings                                          | 1151011   | 587426  | 207510    | 118165 | 174197    | 105054 | 2039799                                | 105.5                                        |
| Uncoated Groundwood                                           | 732237    | 331017  | 108882    | 53035  | 85687     | 45176  | 1073730                                | 64.7                                         |
| Uncoated Book                                                 | 154147    | 88632   | 15194     | 9877   | 19145     | 11927  | 254170                                 | 81.3                                         |
| Coated Print. & Impres. Par                                   | 162441    | 101289  | 55302     | 37905  | 44088     | 31623  | 396778                                 | 212.1                                        |
| Bristols                                                      | 471       | 557     | 40        | 46     | 81        | 88     | 667                                    | 106.8                                        |
| Writings and Similar Paper                                    | 81458     | 46718   | 23900     | 13778  | 21644     | 12888  | 280984                                 | 342.8                                        |
| Thin (except Cigarette)                                       | 20258     | 19213   | 4191      | 3525   | 3554      | 3353   | 53468                                  | 284.6                                        |
| Total Pks & Other Paper                                       | 107515    | 75694   | 10109     | 8169   | 10836     | 8201   | 151684                                 | 52.9                                         |
| Unbleached Kraft Paper                                        | 42013     | 17454   | 2782      | 1169   | 3553      | 1679   | 46543                                  | 24.9                                         |
| Other Pks. & Indust. Paper                                    | 65503     | 58240   | 7327      | 6899   | 7282      | 6521   | 105141                                 | 69.7                                         |
| Tissue                                                        | 11617     | 8225    | 2213      | 1523   | 3009      | 2020   | 22092                                  | 101.1                                        |
| Paperboard, Total                                             | 167818    | 46160   | 25357     | 7529   | 18613     | 5857   | 235093                                 | 61.7                                         |
| Test or Containerboard                                        | 48119     | 13042   | 6738      | 1546   | 5678      | 1945   | 73674                                  | 52.3                                         |
| Semi-Chemical Corrugations                                    | 69564     | 14509   | 8047      | 2047   | 8782      | 2300   | 107817                                 | 77.7                                         |
| Other Paperboard                                              | 50136     | 18609   | 10572     | 3936   | 4154      | 1612   | 73603                                  | 51.2                                         |
| Convtd Paper&Paperbd Products                                 | 151872    | 436563  | 20291     | 52212  | 20294     | 45228  | 213641                                 | 53.7                                         |
| Paper Products, Total                                         | 124816    | 372966  | 16757     | 45243  | 16156     | 37904  | 180119                                 | 80.4                                         |
| Paperboard Products, Total                                    | 27055     | 62597   | 3534      | 6968   | 4138      | 7325   | 33522                                  | 25.6                                         |
| Wet Machine Board                                             | 3584      | 2422    | 235       | 221    | 175       | 111    | 3101                                   | -13.2                                        |
| Construction Paper & Board                                    | 473667    | 104842  | 51680     | 11336  | 49516     | 11093  | 487645                                 | -1.1                                         |
| Notes                                                         |           |         |           |        |           |        |                                        |                                              |
| Other: No Weight Avail. (\$000)                               |           | 148251  |           | 20518  |           | 16562  | 194252                                 | 40.6                                         |
| Total Imports Incl. Other(\$000)                              |           | 5674392 |           | 679605 |           | 658445 | 7273238                                | 34.6                                         |

## E X P O R T S

|                                                                 | YEAR 1983 |         | JULY 1984 |        | AUG. 1984 |        | (1)<br>Annual<br>Rate<br>Y-T-D<br>1984 | % Change<br>from same<br>Period<br>Last Year |
|-----------------------------------------------------------------|-----------|---------|-----------|--------|-----------|--------|----------------------------------------|----------------------------------------------|
|                                                                 | Tons      | \$000   | Tons      | \$000  | Tons      | \$000  |                                        |                                              |
| Pulpwood Roundwood (cords)                                      | 69497     | 4405    | 8374      | 571    | 7905      | 591    | 79428                                  | 42.8                                         |
| Pulpwood Chips                                                  | 2554176   | 171269  | 196135    | 13569  | 213499    | 15786  | 2371412                                | -14.1                                        |
| Total All Exports                                               | 10888949  | 4221511 | 922654    | 370116 | 958062    | 381802 | 11593397                               | 7.1                                          |
| Wood Pulp Total                                                 | 3643963   | 1362022 | 197776    | 119788 | 318333    | 137824 | 3659700                                | 3.2                                          |
| Cotton Pulp and Other Pulp                                      | 102863    | 69805   | 5683      | 5231   | 8586      | 6670   | 89765                                  | -5.5                                         |
| Waste and Old Paper                                             | 2573716   | 308915  | 258902    | 33771  | 274147    | 35259  | 3117573                                | 30.2                                         |
| Paper, Board & Products, Total                                  | 4568407   | 2480768 | 378293    | 211327 | 356996    | 212050 | 4526360                                | -1.7                                         |
| Paper, Paperboard, Wet Machine Bd. & Construction Paper & Board | 3984277   | 1717768 | 333168    | 153067 | 308040    | 147173 | 3930227                                | -2.7                                         |
| Paper, Pbd & Prod ex Cnst&HMB                                   | 4501038   | 2448778 | 371348    | 207703 | 350348    | 208485 | 4443094                                | -2.1                                         |
| Paper & Paperboard, Only                                        | 3916910   | 1685778 | 326223    | 149443 | 302393    | 143608 | 3846961                                | -3.1                                         |
| Paper, Total                                                    | 773414    | 599370  | 73047     | 53726  | 58411     | 48929  | 820125                                 | 3.7                                          |
| Newsprint                                                       | 294870    | 127119  | 25088     | 9740   | 20888     | 9488   | 302918                                 | 2.7                                          |
| Printings & Writings                                            | 201788    | 198304  | 16738     | 17964  | 15664     | 17037  | 205734                                 | 2.9                                          |
| Uncoated Groundwood                                             | 37289     | 33300   | 2142      | 2183   | 1813      | 1879   | 28449                                  | -24.4                                        |
| Clay Coated Paper                                               | 79182     | 60033   | 7321      | 5827   | 6658      | 5325   | 90142                                  | 20.4                                         |
| Uncoated Free Sheet                                             | 59125     | 71662   | 4432      | 8049   | 5512      | 6880   | 65055                                  | 7.9                                          |
| Other Printings & Writings                                      | 26202     | 33310   | 2843      | 3905   | 1683      | 2953   | 22087                                  | -18.6                                        |
| Total Pks. & Other Paper                                        | 260865    | 255086  | 29457     | 24105  | 21081     | 21176  | 293744                                 | 5.3                                          |
| Unbleached Kraft                                                | 116170    | 43227   | 9370      | 3956   | 10800     | 4600   | 110927                                 | -7.4                                         |
| Other Pks. & Indust. Paper                                      | 144695    | 211859  | 20087     | 20149  | 10162     | 16577  | 182816                                 | 14.9                                         |
| Tissue                                                          | 15881     | 18861   | 1784      | 1817   | 898       | 1228   | 17732                                  | 4.6                                          |
| Paperboard, Total                                               | 3143496   | 1086408 | 253176    | 85716  | 243982    | 94679  | 3026835                                | -4.8                                         |
| Solid Wood Pulp                                                 | 2993868   | 1016184 | 242772    | 90429  | 230651    | 88199  | 2876185                                | -4.6                                         |
| Total Linerboard                                                | 2254538   | 575862  | 179358    | 55932  | 182932    | 59012  | 2137028                                | -5.4                                         |
| Bleached Kraft Linerboard                                       | 160253    | 64914   | 14340     | 5852   | 8072      | 3210   | 127902                                 | -3.9                                         |
| Unbleached Kraft Linerbd                                        | 2094285   | 510948  | 165013    | 50080  | 174860    | 55802  | 2009125                                | -5.5                                         |
| Other Unbleached Kraft                                          | 107141    | 51822   | 13030     | 4991   | 6424      | 3426   | 124595                                 | 18.5                                         |
| Other Bleached Kraft                                            | 558431    | 371357  | 48127     | 28797  | 36935     | 24978  | 375687                                 | 1.7                                          |
| Semi-Chemical Corrugations                                      | 73758     | 17144   | 2257      | 709    | 2359      | 783    | 38874                                  | -54.2                                        |
| Recycled Paperboard                                             | 149628    | 70224   | 10404     | 5288   | 13331     | 6481   | 150651                                 | -7.8                                         |
| Convtd Paper&Paperbd Products                                   | 584128    | 783001  | 45125     | 58260  | 47956     | 64877  | 596133                                 | 5.0                                          |
| Paper Products, Total                                           | 311722    | 535596  | 21210     | 38233  | 24032     | 43108  | 309581                                 | 1.1                                          |
| Paperboard Products, Total                                      | 272408    | 227406  | 23915     | 20027  | 23924     | 21769  | 286552                                 | 8.4                                          |
| Wet Machine Board                                               | 11622     | 5420    | 1432      | 725    | 1187      | 642    | 14202                                  | 12.9                                         |
| Construction Paper & Board E                                    | 55746     | 26570   | 5514      | 2899   | 5460      | 2923   | 69063                                  | 23.5                                         |
| Notes                                                           |           |         |           |        |           |        |                                        |                                              |
| Other: No Weight Avail. (\$000)                                 |           | 7865    |           | 1597   |           | 636    | 9122                                   | 20.0                                         |
| Total Exports Incl. Other(\$000)                                |           | 4229475 |           | 371713 |           | 392438 | 4580792                                | 10.2                                         |

SOURCE: Bureau of Census, U.S. Department of Commerce. E - Incl. estim. of tonnage based on square foot data.  
 (1) Annual Rate Year-To-Date is in tons unless otherwise specified in item description.

**PRODUCER PRICE INDEXES**  
1967 = 100

|                                                                    | 1982  | 1983  | JUNE  | JULY  | AUG.  | SEPT    | Annual<br>Rate<br>Y-T-D<br>1984 | % Change<br>From sa.<br>Period<br>Last Ye. |
|--------------------------------------------------------------------|-------|-------|-------|-------|-------|---------|---------------------------------|--------------------------------------------|
| Pulp, Paper and Products<br>except Building Grades                 | 273.2 | 271.4 | 283.3 | 285.6 | 286.3 | 287.2   | 281.0                           | 7.9                                        |
| Pulp Paper & Products, ex. Build-<br>ing Grades & ex Waste Paper # | 275.8 | 273.3 | 293.8 | 296.3 | 297.0 | 298.0   | 281.8                           | 7.3                                        |
| Total Wood Pulp                                                    | 378.1 | 347.1 | 407.6 | 410.6 | 410.0 | 408.5   | 384.3                           | 14.1                                       |
| Total Paper                                                        | 286.3 | 282.3 | 301.4 | 307.8 | 306.9 | 306.7   | 301.6                           | 7.6                                        |
| Total Paper, exc. Newsprint                                        | 278.3 | 277.0 | 300.8 | 304.5 | 304.5 | 303.6   | 300.6                           | 8.6                                        |
| Newsprint                                                          | 315.8 | 303.0 | 314.8 | 334.7 | 330.7 | 331.2   | 318.7                           | 6.3                                        |
| Total Paperboard                                                   | 254.8 | 250.8 | 278.1 | 278.1 | 285.4 | 288.2   | 276.6                           | 11.4                                       |
| Total Paper and Paperboard #                                       | 276.5 | 272.4 | 294.4 | 298.9 | 300.2 | 300.8   | 283.8                           | 8.7                                        |
| Converted Products                                                 | 264.4 | 265.4 | 280.8 | 281.8 | 282.4 | 283.8   | 278.4                           | 5.2                                        |
| Waste Paper                                                        | 121.1 | 158.6 | 257.3 | 254.7 | 254.5 | 248.6   | 246.4                           | 76.0                                       |
| All Commodities                                                    | 298.3 | 303.1 | 311.4 | 312.0 | 310.9 | 308.5   | 310.5                           | 2.8                                        |
| Industrial Commodities                                             | 312.3 | 315.7 | 323.9 | 324.0 | 323.5 | 32842.0 | 3835.6                          | 1130.1                                     |

SOURCE: Producer Price Indexes -Bureau of Labor Statistics, U.S. Department of Labor # Computed by API

Paper and Allied Products Companies

Sales and Earnings

|                                               | Sales             |        |                 | Net Profit After Taxes <sup>1/</sup> |       |                 | Earnings/Sales |      |
|-----------------------------------------------|-------------------|--------|-----------------|--------------------------------------|-------|-----------------|----------------|------|
|                                               | 1984              | 1983   | Change<br>84/83 | 1984                                 | 1983  | Change<br>84/83 | 1984           | 1983 |
|                                               | (Million Dollars) |        | \$              | (Million Dollars)                    |       | \$              | %              | %    |
| <u>32 Paper and Allied Products Companies</u> |                   |        |                 |                                      |       |                 |                |      |
| First Quarter                                 | 12,570            | 10,449 | +20.3           | 554                                  | 326   | +69.9           | 4.4            | 3.1  |
| Second Quarter                                | 13,371            | 11,099 | +20.5           | 750                                  | 401   | +87.0           | 5.6            | 3.6  |
| Third Quarter                                 | 13,104            | 11,476 | +14.2           | 732                                  | 460   | +59.1           | 5.6            | 4.0  |
| First Three Qtrs.                             | 39,045            | 33,025 | +18.2           | 2,036                                | 1,188 | +71.4           | 5.2            | 3.6  |
| <u>4 Forest Products Companies</u>            |                   |        |                 |                                      |       |                 |                |      |
| First Quarter                                 | 3,298             | 2,814  | +17.2           | 115.5                                | 59.0  | +95.8           | 3.5            | 2.1  |
| Second Quarter                                | 3,698             | 3,354  | +10.3           | 198.0                                | 131.7 | +50.3           | 5.4            | 3.9  |
| Third Quarter                                 | 3,668             | 3,299  | +11.2           | 147.7                                | 62.6  | +135.9          | 4.0            | 1.9  |
| First Three Qtrs.                             | 10,664            | 9,467  | +12.6           | 461.2                                | 253.3 | +82.1           | 4.3            | 2.7  |
| <u>9 Paper Related Companies</u>              |                   |        |                 |                                      |       |                 |                |      |
| First Quarter                                 | 28,001            | 26,466 | + 5.8           | 1,072                                | 852   | +25.8           | 3.8            | 3.2  |
| Second Quarter                                | 28,318            | 27,033 | + 4.8           | 1,188                                | 1,141 | + 4.1           | 4.2            | 4.2  |
| Third Quarter                                 | 28,243            | 26,963 | + 4.7           | 1,048                                | 1,203 | -12.9           | 3.7            | 4.5  |
| First Three Qtrs.                             | 84,562            | 80,462 | + 5.1           | 3,308                                | 3,196 | + 3.5           | 3.9            | 4.0  |

1/ As published; income from current operation is used when published separately.

### Wood Pulp

Market wood pulp production continued strong, with the nine-month 1984 total at a record-high 6.8 million tons per year, about 5% above its year-ago level. Dissolving pulp production held close to its year-ago level, while the paper grades of chemical market pulp showed a 6.6% gain. Most of this gain was in shipments to the domestic market, which rose 10%, while exports gained only 3%. The relatively small gain in exports reflected the impact of the strong dollar. The strong dollar also stimulated imports: Imports of chemical paper grade market pulp in the first eight months of 1984 (latest available data) were 14% above their year ago level and slightly above the rate of exports. In 1982 and 1983 exports of these grades of wood pulp had exceeded imports, as shown in the table on page 5.

Total wood pulp production in the first eight months of 1984, as shown in the table on page 5, was at the record-high rate of 56 million tons per year, 7.7% above its year-earlier level. For the total of all chemical paper grades, wood pulp production, which includes the wood pulp integrated to paper and paperboard production, was up 7.4%, while production of mechanical pulp, which includes the fast-growing thermomechanical grades, was up 12.3%. Production of semi-chemical wood pulp gained 6.9%.

### Sales and Earnings

Data on sales and after-tax earnings of 32 paper and allied products companies reported in the press indicate that both sales and earnings in the third quarter of 1984 showed less than seasonal decline. The data for each of the first three quarters of 1984 and 1983 are shown in the bottom half of page 10.

In the second half of 1983 paper and paperboard production surged strongly upward. Sales and earnings in the third quarter of 1983 reflect the impact of this growth, with both showing a contra-seasonal rise from the second quarter level. Even with this increase, the after-tax margin on sales in that earlier period remained at the relatively low level of 4.0%.

Continued on Page 12

The declines in sales and earnings of these companies in the third quarter of 1984, while less than normal, still resulted in smaller gains over year-ago levels than were evident in the two earlier quarters of 1984. The third quarter 1984 sales gain was 14.2%, compared to 20.4% in the first half of the year, while the after-tax earnings gain was 59.1%, compared to 79.4% in the first half. For entire three quarters of 1984, sales were up 18.2% and earnings 71.4%.

These gains brought the sales margins back toward the levels that prevailed prior to the 1932 recession. For both the second and third quarters of 1984, the margin on sales amounted to 5.6%, while for the entire three-quarter period, the 1984 margin averaged 5.2%.

Sales of these reporting companies represented about 72% of the rate reported for all paper and allied products companies by the Bureau of the Census in its Quarterly Financial Report for Manufacturing, Mining and Trade Corporations. However, these 32 companies include 3 new companies that may not be included in the Census lists. It is Census policy not to release any information on individual company data, even to the point of revealing the names of the companies included in their industrial classifications.

Three forest products companies also reported sizeable volume gains for wood pulp, paper and paperboard. The sales and earnings data for these companies are also shown on page 10.